MEMO TO: Dave Schafer CENAE-EOC, John Hasselman CENAN-OP-EM
SUBJECT: Ice conditions on Maine rivers
DATE: 31 March 2005

On 30 March 2005, Andy Tuthill checked ice conditions by air on the following rivers:

Androscoggin River: Berlin, NH to Canton, ME
Sandy River: Farmington, ME to Kennebec confluence
Piscataquis River: Abbot to Dover Foxcroft, ME
Pleasant River below Brownsville, Jct. ME.
West Branch Penobscott River, Millinocket to below Medway, ME
Aroostook River, Ashland to mouth
St. John River, Big Rapids to Ft. Kent
Allagash River near Allagash, ME
Sebasticook River, Pittsfield, ME to mouth
Kennebec River: Bingham to Augusta, ME
Saco River: Fryeburg, ME, Conway NH
Pemigewasset River: Plymouth, NH and upstream

Also, with the assistance of Joe Grimig of MEMA, I retrieved the ice motion detector from Augusta. The detector reported the release of the channel ice on Tuesday 24 March at 6:30 AM. The bank ice line was tangled in submerged logs and did not trigger.

The *Androscoggin River* ice open except for a 15-mile-long stretch of decaying sheet ice between Hanover and Rumford (Fig. 1). At this point, this ice is probably sufficiently thin and weak that the potential for any serious ice jams is extremely low.

The *Sandy River* is still ice covered above Farmington (Fig. 2) but the ice is starting to deteriorate and open up in the meandering section below town where ice jams typically form (Fig. 3). Ice jams and ice jam flooding are still a possibility at Farmington with the heavy rain predicted for Saturday.

The *Piscataquis River* ice cover is still quite complete from above Abbot to Guilford (Fig. 4). From Guilford to Dover-Foxcroft, about 70 % of the ice cover remains in a thinned and weakened condition (Fig. 5). The potential for ice jams and ice jam floods exists at Guilford and, to a slightly lesser degree, at Dover-Foxcroft.

The ice cover on the *Pleasant River* from Brownsville Junction to the mouth is cover is mostly complete but appears sun-decayed.

The *West Branch of the Penobscott* is open through Millinocket, downstream past the historic ice jam locations at Medway. An open channel has melted through the downstream end of Pemadumcook Lake upstream of Millinocket. The *East Branch of the Penobscott* is still ice covered in the vicinity of Grindstone and above.

The *Aroostook River* ice cover is nearly complete from Ashland to the mouth. A substantial ice supply upstream remains upstream of the traditional ice jam location at Fort Fairfield (Fig.6). .

The St. John River and surrounding watershed is still very winter-like in appearance from Fort Kent upstream beyond Dickey (Fig. 7). No evidence was seen of any mid-winter ice jams on the St. John near Allagash, as have occurred in past winters. A frozen-in-place mid-winter ice jam contributed to ice jam and flood of April 1991. The ice cover below the Allagash confluence appeared thick and hummocky, probably as a result of frazil deposition during freezeup. In the 2-mile-long Big Rapids above Dickey the grounded frazil deposits appeared extremely thick (Fig. 8).

The Sebasticook was mostly melted out from Pittsfield down to Winslow, with decaying ice covers behind the dams at Burnham and Clinton. Several miles of decayed ice remained upstream of the Ft. Halifax Dam at Winslow (Fig. 9).

The *Kennebec River* is open from Bingham on downstream with the exception of a 3-mile-long decayed ice cover upstream of the Shawmut Dam.

The *Saco River,* was open from North Conway past Fryeburg as far as visible. The *Pemigewasset River* was open at at below of Plymouth and about 3/4 open above that.

Conclusions

The threat of serious ice jams for southern Maine, which includes the Androscoggin and Kennebec Rivers, is past. With the heavy rain forecast for Saturday (Fig. 10) the Sandy and Piscataquis Rivers will likely release their ice jams will form at the traditional locations. Sufficient ice remains on the Aroostook River for a serious jam to occur at Fort Fairfield. Little evidence of melting is apparent on the St. John and Allagash Rivers. Depending on rainfall quantity and intensity, the thick, relatively unconsolidated snow pack on the St. John Basin may dampen the runoff response and avoid breakup and jams.

Respectfully Submitted,

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Fig. 1, Androscoggin River looking upstream past Rumford, ME.

Fig. 2. Sandy River upstream at Farmington, ME, looking upstream.

Fig. 3. Melting on the Sandy River below Farmington.

Fig. 4. Piscataquis River at Guilford ME looking upstream.

Fig. 5. Piscataquis River at Dover-Foxcroft, ME.

Fig. 6. Aroostook River at Fort Fairfield ME.

Fig. 7. St. John River at Dickey, looking downstream towards Allagash, ME.

Fig. 8. Thick frazil deposits in Big Rapids upstream of Dickey, ME.

Fig. 9. Kennebec and Sebasticook Rivers looking downstream towards Waterville.

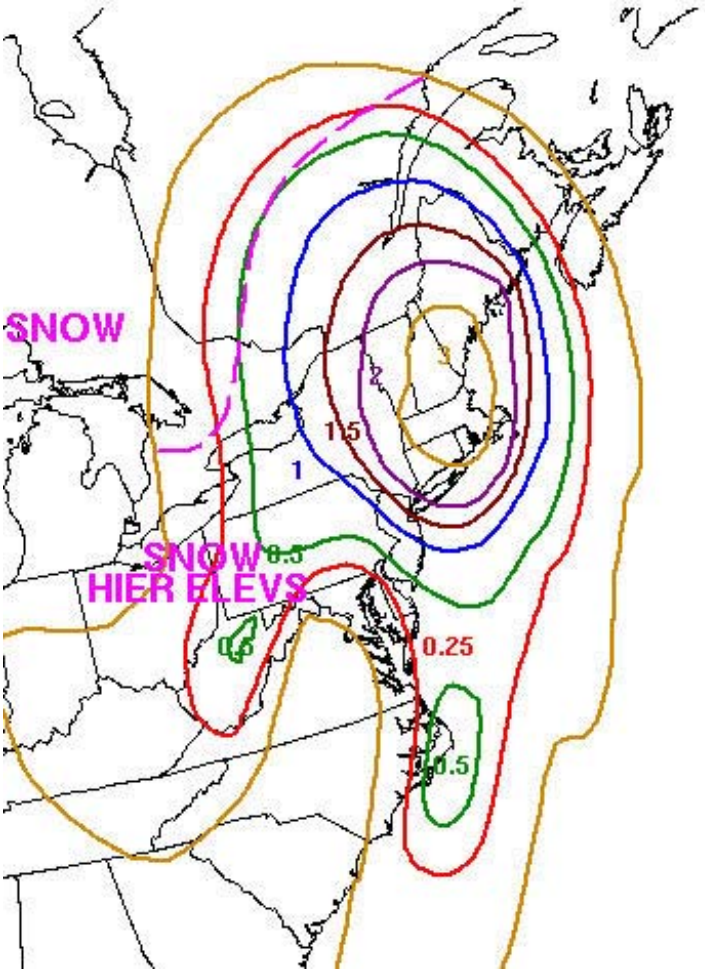

Fig. 10. Predicted rainfall for Saturday April 2, 2005.